

Claims;

- SUB A2*
- HONTECH INC.*
1. A toner for developing static latent image to form a color image by combining chromatic toners consisting of a yellow toner, a magenta toner and a cyan toner, and a black toner, wherein each of the toners is a toner produced by polymerization of a polymerizable monomer in an aqueous medium, the difference of re-dispersion electro-conductivity of each of the toners is within the range of from 0.8 to 12 $\mu\text{S}/\text{cm}$, the number of free colorant particles on the black toner surface is less than 9 per 500 toner particles, and a light absorbance at 500 nm of a black toner dispersion is nor more than 0.08.
 2. The toner of claim 1, wherein $\rho_y > \rho_{bk}$, $\rho_m > \rho_{bk}$ and $\rho_c > \rho_{bk}$, when the ρ_y is re-dispersion electro-conductivity of the yellow toner, the ρ_m is re-dispersion electro-conductivity of the magenta toner, the ρ_c is re-dispersion electro-conductivity of the cyan toner and the ρ_{bk} is re-dispersion electro-conductivity of the black toner.

3. The toner of claim 1, wherein the each of the toners is a toner produced by a process comprising polymerizing a polymerizable monomer in the aqueous medium, salting/coagulating and washing.

4. The toner of claim 1, wherein each of the chromatic toners has an average diameter of is from 3 to 8 μm and a ratio of toner particles having a shape coefficient of from 1.2 to 1.6 of not less than 65%.

5. The toner of claim 1, ~~wherein each of the chromatic toners has the average diameter of from 3 to 8 μm and a ratio~~ of particles having no corner of not less than 50%.

6. The toner of claim 1, wherein the sum M of a relative frequency m_1 of toner particles included in the highest frequency class and a relative frequency m_2 of toner particles included in the next frequency class is not less than 70% in a histogram showing the particle size distribution based on the number of the particles in which natural logarithm $\ln D$ of the particle diameter of each of the

toners $D \mu\text{m}$ is taken on the horizontal axis and the axis is divided every 0.23.

7. An image forming method for forming a color image by a combination of chromatic toners consisting of a yellow toner, a magenta toner and a cyan toner and a black toner, wherein each of the toners is a toner produced by polymerization of a polymerizable monomer in an aqueous medium, the difference of re-dispersion electro-conductivity of each of the toner is within the range of from 0.8 to 12 $\mu\text{s}/\text{cm}$, a number of free colorant particle on the black toner surface is less than 9 per 500 toner particles, and a light absorbance at 500 nm of a black toner dispersion is nor more than 0.08.

8. The image forming method of claim 7, wherein $\rho_y > \rho_{bk}$, $\rho_m > \rho_{bk}$ and $\rho_c > \rho_{bk}$, when the ρ_y is re-dispersion electro-conductivity of the yellow toner, the ρ_m is re-dispersion electro-conductivity of the magenta toner, the ρ_c is re-dispersion electro-conductivity of the cyan toner and the ρ_{bk} is re-dispersion electro-conductivity of the black toner.

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